

ABSTRACT

N⁺-type semiconductor regions 12d are formed on a front surface side of a p-type layer 12c of a semiconductor substrate 12, and these n⁺-type semiconductor and p-type semiconductor constitute photodiodes. A metal wire 14 electrically connected to an isolation region 12e is formed on a first insulating layer 13. The metal wire 14 is provided so that its edge covers pn junction portions (interfaces between p-type layer 12c and n⁺-type semiconductor regions 12d) exposed on a light-incident surface of the semiconductor substrate 12 (p-type layer 12c), above the pn junction portions, and is of grid shape. The metal wire 14 is grounded and the isolation region 12e is set at the ground potential.